THE RELATIONSHIP BETWEEN TEACHER ATTITUDES
AND OBSERVED CLASSROOM BEHAVIOR

By

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To My Parents

From whom I learned the joy of the

journey

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Purpose

This study was undertaken to explore what relationship
the belief systems and structures of teachers have on certain
classroom processes. The belief structure examined was dog-
matism, and the belief systems examined were attitudes toward
educational practices, self and others. The study tried to
answer the following questions:

1. What relationship exists between teaching experience
and child-centered teaching practices?

2. What relationship exists between dogmatism and child-
centered teaching practices?

3. What relationship exists between educational attitudes
and child-centered teaching practices?

4. What relationship exists between attitudes of self-
acceptance and child-centered teaching practices?

5. What relationship exists between attitudes of acceptance of others and child-centered teaching practices?

6. What relationship exists between teacher belief systems and structures, teacher years of experience, and child-centered teaching behaviors?

Procedures

To answer these questions, data from 66 sixth grade class-room teachers were collected. The data included teacher responses to three self-report instruments which measured dogmatism, attitudes toward educational practices that could be considered child-centered or teacher/authority-centered, and attitudes of acceptance of self and other persons. Teachers also indicated how many years of teaching experience they had. Each teacher was observed teaching a regularly scheduled class for a period of 30 minutes. During this time data were obtained on the TPOR to indicate to what degree child-centered teaching practices were used during the observational period.

Results

There was no significant relationship found to exist between years of teaching experience and child-centered teaching practices.

There was no significant relationship found to exist between teacher dogmatism and child-centered teaching practices.

A significant relationship was found between attitude toward educational practices and child-centered teaching practices.

There was no significant relationship found to exist between teacher attitude of acceptance of self and child-centered teacher practices.

There was no significant relationship found to exist between teacher attitude of acceptance of others and child-centered teaching practices.

There was no significant relationship found to exist between teacher attitude toward educational practices, self, others, teacher dogmatism, and teacher years of experience and child-centered teaching practices.

The data were reexamined using the same procedures but excluding all data from teachers who were teaching mathematics during the observation period. In this reanalysis, a significant relationship was again found between educational attitudes and child-centered teaching practices. There were also two relationships found that were not present when all the teachers were used in the analysis. In the new analysis, dogmatism was also found to be significantly related to child-centered teaching practices. In addition, years of teaching experience, dogmatism, and attitudes toward educational practices, self and others were significantly related to child-centered teaching practices.

CHAPTER I

INTRODUCTION

This study is an examination of certain teacher attributes as they relate to the teaching process. It is designed to examine some cognitive characteristics which all teachers possess as they relate to the behavior that teachers engage in within the classroom. These personal characteristics will be studied as they relate to classroom behaviors which are classified as congruent or not congruent with John Dewey's philosophy of education.

Statement of the Problem

This study examines the relationship between certain teacher-held attitudes and teacher classroom behavior. Specifically, it is concerned with the attitudes teachers hold toward educational practices, toward themselves, toward other persons, and the degree of teacher open-mindedness as these cognitive variables relate to teacher classroom behavior. It attempts to answer the following questions:

1. What relationship exists between teacher experience and teacher classroom behaviors that are child-centered according to the Experimentalist tradition?

2. What relationship exists between the degree of teacher open-mindedness and teacher behaviors that are child-centered according to the Experimentalist tradition?

3. What relationship exists between teacher attitudes toward educational practices and teacher classroom behaviors that are child-centered according to the Experimentalist tradition?

4. What relationship exists between teacher attitudes toward self and teacher classroom behaviors that are child-centered according to the Experimentalist tradition?

5. What relationship exists between teacher attitudes toward others and teacher classroom behaviors that are child-centered according to the Experimentalist tradition?

6. What relationship exists between teacher attitudes toward educational practices, teacher attitudes toward self, teacher attitudes toward others, and the degree of teacher open-mindedness, and teacher behaviors that are child-centered according to the Experimentalist tradition?

Background

Education is the cornerstone of American society and a multi-billion dollar enterprise. Teachers and students spend countless hours every year engaged in instructional activities. Yet we presently are unaware of which combinations of teacher

characteristics and skills produce the desired learning outcomes in the instructional process. The teaching process at present rests on insecure and fragmented empirical data. "The great mass of research on teacher effectiveness leads to one uncontested conclusion: no comprehensive criterion of teacher effectiveness, no single identifiable combination of personal, academic, or professional qualities in the teacher either at the time of admission to teacher training or upon graduation, and no particular factor or technique in the training program has consistently correlated with teacher effectiveness" (Rinehart, 1970, p. 9).

Teacher educators and supervisors are still faced with this problem. Colleges of education are challenged with the responsibility of preparing competent, professional teachers to staff the nation's schools. Unfortunately, although the programs of these educational institutions are based upon various philosophies of education and theories of learning, there is no sure knowledge that teaching pre-service teachers a certain set of teaching behaviors and information will result in a teacher who is more effective than one taught a slightly different set of behaviors and information. Indeed, even if we knew with absolute surety in which instances certain sets of teaching behaviors and information would produce desired results in learners it still might not be enough. If perceptual psychologists, such as Arthur Combs, are correct, the behavior teachers will actually exhibit in their classrooms will be a result of the ideas they have about themselves and their idiosyncratic perceptions of what the facts are (Combs, 1958).

Colleges of education are called upon to produce and supervisors are called upon to identify effective teachers. But how is the "good" teacher identified? What specific characteristics and behaviors does the "good" teacher possess? The answer will depend upon whom you ask. Some will emphasize classroom structure and discipline. Others will emphasize planning and subject-matter preparedness. Still others will emphasize how perceptive and responsive the teacher is to individual needs, how flexible and original are the teaching methods, or even how the room is arranged and the bulletin boards displayed.

The selection, retention, and rating of teachers are presently extremely subjective processes. School principals generally bear primary responsibility in all three areas. Because of the non-existence of adequate objective criteria, they must base their decisions in these areas on data that are selectively gathered according to subjective criteria. The end result of this process is generally reflected in an instrument which the principal uses to summarize this data in highly inferential categories. How the data are positioned in these categories depends usually upon how favorably the principal has evaluated the performance of the teacher. And this seems to depend upon how similar certain cognitive attributes of the principal are to those of the teachers. Kerlinger (1966) found that the attitude of the person judging determined which traits of teachers were considered most desirable. How teaching performance was rated was studied by Musella (1967). He found that the most closed-minded principals rated their most closed-minded teachers as most effective in performance of role-related tasks.

Cognitive attributes of teachers do seem to influence the ratings they receive. Besides the correlation of closed-mindedness with performance ratings, evidence exists that teachers who possess certain attitudes are highly rated by their supervisors. Because the job of the teacher necessitates working closely with other human beings of diverse cultural origin and philosophical orientation, it seems reasonable that teachers should be sensitive to the needs of others. Research shows that indeed teachers who view administrators and pupils favorably are rated as being effective (Wandt, 1954). They also tend to hold attitudes that consider the learner's needs as important (Brown & Brown, 1968).

The teaching process involves the determination of learner goals and objectives and the implementation of strategies designed to accomplish the goals and objectives. For most teachers this process involves goals, objectives, and strategies for 25 or more pupils. In order to cope with the individual differences which exist within the educational environment, and to effectively make the many decisions they are called upon to make every day, it logically follows that teachers should be flexible, non-judgmental, and capable of objectively assessing pupils, materials, and situations. This is the quality that has been defined as being open-minded (Rokeach, 1960). If the teacher is concerned with the idiosyncratic learning goals of pupils this can be described as a pupil-centered as opposed to subject-centered attitude toward learning.

Although the evidence is inconclusive, it appears that teacher effectiveness is now partly judged according to certain

teacher attitudes and cognitive styles of thinking. Most systems
of teacher ratings at present do not relate specific classroom
behaviors of teachers to ratings of effectiveness. We know
through observation that teachers behave differently from each
other within their classrooms, although all of these differences
have not been identified and objectively defined. We know also
that teachers behave differently toward different students.
Silberman (1969) was concerned with the underlying dynamics of
this differential behavior of teachers toward students. He
found that the basic attitude toward the student determined much
of the teacher's behavior that could be labeled as student con-
tact, positive and negative evaluation, and acquiescence. Stu-
dents could also predict the amount of these behaviors they and
their classmates would probably receive.

We generally assume that we human beings are creatures of
some degree of freedom and choice. As such, we engage in many
acts and behaviors of our own choosing. In a free-choice situa-
tion, these actions and behaviors are a reflection of our beliefs,
attitudes, and values. If this is so, teachers in their classrooms
should exhibit behavior that is a reflection of the basic atti-
tudes they hold toward educational practices and other persons.
This behavior may also reflect the degree to which a teacher is
flexible and objective in processing information, or open-minded.

If more effective teachers are being chosen because they
possess certain cognitive characteristics which are distinct from
those of less effective teachers, their classroom behavior should
differ from that of less effective teachers in observable ways.

This is an important generalization since many supervisors and administrators are now judging classroom success by qualities which are cognitive and not behavioral. The interactions which occur within classrooms that ultimately either promote or hinder learning are more behavioral in nature. Therefore, it is desirable to determine the nature of the linkage between teacher attitudes and observable teacher classroom behaviors that are considered to affect the academic and emotional growth of students.

The research undertaking described here is based upon these propositions: teachers possess fundamental attitudes toward educational practices which they will reflect in their classroom behavior; teachers' fundamental attitude toward themselves will be reflected in their classroom behavior; teachers' fundamental attitudes toward other persons will be reflected in their classroom behavior; the extent to which teachers' possess an open or closed mind will be reflected in their classroom behavior. Based upon these assumptions, measurements will be taken of all these teacher dimensions, both involving attitudes and ways of thinking, and classroom behavior, to determine what kind of, if any, relationship exists between them.

Included in the measure of educational attitudes are statements which deal with the importance of understanding the child's psychological needs, statements which describe practices which place either the learner or the subject matter as central in the teaching-learning process, and statements which emphasize an authoritarian-punitive versus humanistic (in which views of students, particular circumstances, et cetera, are taken into

consideration) view of desirable methods of managing behavior.
These type orientations have been described as teacher-centered
and student-centered behaviors, congruent with attitudes which
are based on two different domains. One domain is the tra-
ditional orientation based upon respect for authority and cen-
trality of subject matter in the teaching-learning process.
The other is an experimental orientation congruent with John
Dewey's philosophy, in which the learner, although guided by
the teacher, is central, with his dignity and rights to be
respected (Wehling & Charters, 1969).

Experimentalism, as a philosophical view, emphasizes the
uniqueness of the individual in experiencing all of life's
phenomenon. Men discover reality for themselves and its truth
is verified in conjunction with others. This view of human
potential is compatible with an attitude which regards other
persons as being essentially capable and effective human beings,
possessing dignity and deserving of one's respect. Self-worth
is also inherent in this position. These two attitudes are also
characteristic of teachers rated as effective by their super-
visors. The two will be measured for effect separately in
this study. The justification for this is that theoretically
one may be favorably disposed towards oneself and unfavorably
disposed towards others. Harris (1969) describes these psycho-
logical states as I'm O.K., you're not O.K.; I'm not O.K.; you're
O.K.; I'm not O.K., you're not O.K.; and I'm O.K., you're O.K.
Which one of these states an individual possesses ultimately is
responsible for the quality and quantity of most interpersonal
transactions.

Also consistent with the experimental philosophic view is the idea that the universe is in constant flux. Nothing is certain except change. Thus, the individual must be capable of receiving and processing from the environment information that may change from occasion to occasion. The label used by John Dewey to describe this general process is "reflective thinking." In order to engage in this process with maximum effectiveness, an individual must possess what is termed by Rokeach as an open mind. An individual has an open or closed mind according to the "extent to which the person can receive, evaluate, and act on relevant information received from the outside on its own intrinsic merits, unencumbered by irrelevant factors in the situation arising from within the person or from the outside" (Rokeach, 1960, p. 57).

Definition of Terms

1. Attitude: A relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner (Rokeach, 1970, p. 112).

2. Attitudes toward educational practices: Defined as measured by the Opinionnaire on Attitudes Toward Education (Lingren & Patton, 1958).

3. Attitudes toward self: Defined as measured by Acceptance of Self and Others (Berger, 1952).

4. Attitudes toward others: Defined as measured by Acceptance of Self and Others (Berger, 1952).

5. <u>Open-mindedness</u>: The degree to which an individual can independently and objectively receive, evaluate, and act upon information (Rokeach, 1960, p. 57).

6. <u>Experimentalist tradition</u>: Educational ideas and practices congruent with the educational philosophy of John Dewey.

7. <u>Child-centered teaching behavior</u>: Defined as measured by the Teacher Practices Observation Record (Brown, 1968).

8. <u>Cognitive characteristics or attributes</u>: These terms as used in this study include the affective realm of cognition.

Hypotheses

1. There is no relationship between child-centered behaviors of teachers and years of teaching experience.

2. There is no relationship between child-centered behaviors of teachers and degree of teacher open-mindedness.

3. There is no relationship between child-centered behaviors of teachers and teacher attitudes toward educational practices.

4. There is no relationship between child-centered behaviors of teachers and teacher attitudes toward self.

5. There is no relationship between child-centered behaviors of teachers and teacher attitudes toward others.

6. There is no relationship between child-centered behaviors of teachers and teacher attitudes toward educational practices, toward self, toward others, degree of open-mindedness, and years of teaching experience.

Limitations of the Study

Because of the nature of the sample used to produce the data for this study, the results cannot be generalized to other groups. All data must be interpreted with consideration for the fact that the sample is made up exclusively of teacher volunteers at the sixth grade level.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

In categorizing the research on teaching, four classes can be used. These four can be labeled presage, context, process, and product variables (Dunkin and Biddle, 1974). Included in the presage variables are those personal characteristics of the teachers and experiences that helped to form the teacher. Context variables are those things within the environment over which the teacher has little control and to which the teacher must adjust. Process variables are concerned with all the behaviors that teachers and pupils exhibit in the classroom. Product variables are the outcomes of the teaching-learning process.

The study of presage variables has resulted in an abundance of research. Of three bibliographies which reference works in this area prior to 1950, one alone lists over 1,000 titles (Getzels & Jackson, 1963, p. 506). This interest probably reflects the assumption that the teacher is a critical part of the teaching-learning process. As such, attributes of the teacher are possible sources of influence on the teaching-learning process. Another aspect of this assumption is the effect that teacher attributes have on processes within the classroom. Teacher education is predicated upon the assumption that teachers

are, indeed, critical in the teaching-learning process, do possess certain attributes which can be changed during teacher-education, and the resultant changes will enhance the teaching-learning process which occurs within schools.

According to Dunkin and Biddle, behavior of the teacher is ". . . subject to beliefs held by the teacher concerning the curriculum, the nature and objectives of the teaching tasks, expectations for pupils, and norms concerning appropriate class-room behavior. Thus, a reasonably good prediction of the class-room behavior of the teacher can presumably be obtained by find-ing out what the teacher thinks she prefers to, ought to, and will do in the classroom" (1974, p. 412). Rokeach describes a belief as being a predisposition to action (1970, p. 113) which varies along a central peripheral dimension (1970, p. 3). Beliefs are a part of a larger system of individual psychological makeup. Beliefs form an integral part of attitudes which individuals possess. "An attitude is a relatively enduring organization of beliefs around an object or situation predispos-ing one to respond in some preferential manner" (Rokeach, 1970, p. 112). Oppenheim (1966) describes attitudes as being " . . . a state of readiness, a tendency to act or react in a certain manner when confronted with certain stimuli." Attitudes, as other psychological constructs, can be measured. Since atti-tudes of teachers are attributes which potentially influence much of teacher thought, decisions, and actions, they are a latently rich source of beneficial insight into the dynamics of the classroom.

Teacher Attitudes Toward Educational Issues

Teacher attitudes toward educational practices have been investigated upon numerous occasions. Much of the content of the attitude scales used are statements based upon a Deweyan Progressivistic view of the teaching-learning process, or a classical authority based subject oriented view of the teaching-learning process.

Dewey (1902) expressed the view that educators seemed to be in two opposing camps. In one camp were those who emphasized the child and the child's interests and teachers who possessed sympathy for the child and knowledge of the child's instincts. Teachers ideally, according to Dewey, should be at neither extreme position. Instead, they should be concerned with how they can structure the child's learning environment so that subject-matter can become a part of the child's experience. The view of educators in which the child's interests and needs are considered in planning educational experiences has been identified with progressivist and experimentalist educational philosophies. Traditionalism is connected with the view that the curriculum should be concerned with subject-matter that has proven value in the society.

Kerlinger (1967a) examined the factors which seemed to identify basic teacher attitudes. He tried to determine the factorial nature of these attitudes, and study their relations and content. The sample of the study was composed of teachers and students in colleges of education. In analyzing the results

of the scale which was administered, eight factors were identi-
fied. All of the factors could be shown to be either progressive
or traditional in nature. His conclusion was that the evidence
"supports the contention that educational attitudes consist of
two relatively independent basic dimensions that can legitimately
be called 'progressivism' and 'traditionalism'" (p. 203).

In analyzing attitudes toward education, Sontag (1968)
also found distinctive factors. He identified a progressive fac-
tor, a traditional factor, and two more factors which he called
Elementary Factors C and D. Factor C seemed to be aligned with
traits which Ryans had described as stimulating, imaginative,
and original behaviors. Factor D seemed to reflect self-control
in teaching. Although he identified four factors he found that
two of them accounted for most of the variance in attitudes.
These two were concern for students and structure-subject-
matter, and most progressives were associated with the former
and most traditionalists were associated with the latter.

Wehling and Charters (1969) attempted to assess teachers'
beliefs and found eight distinct dimensions. They considered
the first two to reflect commitment to educational goals and
the remaining six to reflect beliefs about processes necessary
to attain the educational goals - means and ends of education.
The first dimension was Subject-Matter Emphasis, a view that
the content of the disciplines is inherently valuable. The
second was Personal Adjustment Ideology which is characterized
by the view that instruction should be organized with the

students' interests, needs and well-being considered. Other dimensions included Student Autonomy vs. Teacher Control, Emotional Disengagement, Consideration of Student Viewpoint, Classroom Order, Student Challenge, and Integrative Learning. He found that the dimensions were independent, but did form a pattern that was congruent with the two attitude domains described by Kerlinger, one teacher-centered and the other student-centered.

Kerlinger's work in the area of attitude measurement led him to the conclusion that social attitudes, including educational attitudes, are dualistic and not bipolar in nature (Kerlinger, 1967b). This indicates that possessors of progressive attitudes use different referents and standards when fixing on objects of their progressive attitudes than do traditionalists when fixing on the same objects. Support for the duality of the basic educational attitudes was given by Wehling and Charters (1969) in their study in which the eight dimensions of teacher attitudes which were uncovered were found to be unipolar, either present or absent, and not bipolar in nature. Reid and Holley (1974), and Marjoribanks and Josefowitz (1975) have since done studies which corroborate Kerlinger's findings.

Upon examination, many of the decisions which are made within the educational setting concerning what the curriculum should be and how it should be implemented can be seen as outgrowths of these two basic attitudes concerning desirable practices. Thus the recent movement toward basic education and stricter student discipline reflects the belief that inadequacies in the present structure can be solved by a return to the

traditional, old and true methods. The emphasis would be on mastery of the traditional core subjects and the student's primary responsibility would be to adapt to the requirements of school. The progressive view, on the other hand, can be seen in the growth of the middle-school concept. A growing trend in the number of communities developing middle schools can be partly ascribed to the desire to serve the unique developmental needs of children during their transition into adolescence. Ideally, the middle school is established to enhance the unique capabilities of each student in coping with the larger world around him as well as mastering required academic courses.

Teachers, principals, curriculum workers, professors in colleges of education, and others concerned with the education of youth have been shown to possess these two basic attitudes. Which of these attitudes predominates in an individual seems to influence some choices made in the educational environment. In this sphere, Kerlinger (1966) found that individuals described the characteristics and traits of the "good" or "effective" teacher depending upon their own attitudes toward education. In analyzing the traits described, he found three factors which described the "good" teacher. Two of these factors were the "progressive" and the "traditional" notion of the teacher. These different factors contained statements about educational practices which resembled progressivism and traditionalism as described by John Dewey. Kerlinger and Pedhazur (1968) together examined how individuals with progressive and traditional attitudes viewed certain traits of teachers. They found that those

with progressive attitudes viewed person-oriented traits as desirable, while those who had traditional attitudes viewed task-oriented traits as desirable.

It would seem likely that these fundamental attitudes toward educational practices would be directly related to the actual teaching acts that teachers engage in. Actual research in this area is contradictory, however. One study relates educational attitudes of pre-service teachers to their activities (Larimore, Musser, & Sagan, 1973). It was found that the students with the more progressive attitudes generally had a wider range of involvement and better performances on situation knowledge tests. Oliver (1953) attempted to measure the relationship between what he called modern educational beliefs and classroom practices which were based upon current knowledge of learning and human growth and development. Although most teachers agreed with the belief statement, the correlation between beliefs and practices was not significant.

Whitmore (1974) developed an attitude inventory to identify teachers with traditional and experimental attitudes. The inventory was made up of statements which would describe either one position or the other. She used informal classroom observation to determine which teachers were progressive and experimental in practice. The results of the inventory showed that the teachers did score in accordance with the informal assessment.

A study was made by Brown (1968) in which he analyzed classroom practices of teachers as they related to educational

beliefs. He found that the beliefs were predictors of classroom behavior, although basic philosophic beliefs seemed to be better predictors. It appeared that educational beliefs could be said to have a generalized effect upon classroom behavior (Brown & Webb, 1968).

In the three studies which related educational beliefs to teachers' classroom behavior, one (Whitmore, 1974) did not use a classroom observational system, but instead relied on observers' global assessment of behavior. The other two both used observational systems. Results obtained differed, with one study (Brown, 1968) noting a strong relationship between educational attitudes and behavior, while the other (Oliver, 1953) noted no significant relationship. However, although Oliver did not obtain significant results he found a modest positive correlation. These undertakings indicate that the issue of the effect of educational attitude on overt behavior in classrooms is not yet satisfactorily resolved.

Education and Open-mindedness

Rokeach developed a theory to account for the way people believe what they do (Rokeach, 1960). Within this theory, persons vary along a continuum which is characterized by varying degrees of rigidity in the ability to objectively assess beliefs. At one end of the continuum is the open-minded individual, one who is able to put his beliefs to the hard test of reality. The closed-minded, or dogmatic individual at the other end of the continuum is less able to reality test his beliefs and

tenaciously holds on to them with the sanction of various authorities to which he adheres. In an extensive review of research literature dealing with studies of dogmatism and based upon this theory, Vacchiano et al. (1969) found that the evidence supports its tenets. It has generally been found that persons do differ in the way they react to authority depending upon whether they are high- or low-dogmatics. Research also supports the theory that the more dogmatic a person is, the less tolerant, flexible and secure he is.

Experienced teachers have been found to be less dogmatic than pre-service teachers and college students in general (Cappelluzzo & Brine, 1969), but age apparently has no relationship with dogmatism (Cohen, 1971; Wesselman, 1969). Dogmatism seems to be related also to certain types of beliefs which teachers possess. Cohen (1971) found that pre-service teachers who were high dogmatics tended to prefer students who were obedient, accepting of authority, and striving for distant goals. Cohen characterized this as tending toward a teacher-directed classroom. Students who possess those qualities listed would probably feel comfortable in learning situations structured according to traditional educational beliefs.

Although it was found that pre-service teachers tend to characterize the traits of ideal pupils according to how dogmatic they themselves are, it does not seem to affect their perceptions of some pupil needs. In an investigation of the relationship between dogmatism and the accuracy of interpersonal

perception, Brumbaugh, Hoedt, and Beisel (1966) found no significant relation between dogmatism and the ability to perceive interpersonal needs accurately. Vacchiano et al. (1969) found that evidence in the area of interpersonal relations was too unclear to make any accurate judgments.

Investigators have been able to consistently show a relationship between dogmatism and educational beliefs that can be called traditional or child-centered. Lindgren and Singer (1963) investigated these relationships in Brazil to see if there was a cross-cultural trend. They found that child-centered attitudes were positively correlated with attitudes characterized by independence of judgment, a quality of open-minded individuals. Strawitz (1975) examined how dogmatism in pre-service and in-service teachers related to attitudes toward teaching science. She found that for both groups there was a negative correlation between the dogmatism score and the belief score. High belief scores in this study are indicative of an attitude favorable to learning by active participation.

Wesselman (1969) explored the relationship between dogmatism and teacher expressed preference for certain educational objectives. He used 53 sixth grade teachers. The Rokeach Dogmatism Scale, form E, was used to measure dogmatism. An educational attitude scale was devised by Wesselman to measure preference for certain educational objectives and objectives for the cognitive, affective and psychomotor domains. The attitude scale appears to express the dichotomy between traditional and progressive

educational thought. He found no significant relationship between dogmatism and certain demographic characteristics, i.e., age, sex, years of teaching experience, marital status, father's occupation, and graduate major and/or minor area. Teachers in upper socio-economic schools were found to be significantly more dogmatic than those in lower socio-economic schools. There was no significant difference in math achievement gain for pupils of the teachers studied. There was also a significant relationship between dogmatism and belief statements. Teachers who were high-dogmatic agreed significantly more to statements which express a traditionalist view than low-dogmatic teachers.

The stability of educational attitudes in persons of varying degrees of dogmatism seems to depend upon experiences encountered. Evidence exists that mode of presentation of information affects the receptivity of high- and low- dogmatics to new thought. After a course during which they were presented to progressive ideas, high-dogmatic pre-service teachers evidenced greater progressive educational attitudes towards children, discipline and teaching methods than did low-dogmatics (Soh, 1974). Scarr (1970) found a similar phenomenon when investigating attitude change in students. The class sections which noted the largest attitude change were characterized by more lecture, tests and assigned readings than those with little change. These studies suggest that students react to the authority of the presenter when presented with new ideas. All students seem to be influenced by the authority in this situation, but the more dogmatic students seem to be influenced significantly

more. This suggests that inservice and pre-service education might be best structured to fit the level of dogmatism of the participants. High-dogmatics and low-dogmatics might best be separated and given different type instruction for the best results.

Vacchiano et al. (1966) studied the relationship between attitude change and training, dogmatism, and authoritarianism. He found that the subjects who experienced the least change in attitude, as measured by the Minnesota Teacher Attitude Inventory, were more authoritarian, but not more dogmatic.

Bogut (1975) investigated the relationship of attitude change from exposure to structured and unstructured teaching strategies and degree of dogmatism. He used pre-service elementary education majors and assigned them to high and low dogmatic groups on the basis of scores obtained on Form E of the Dogmatism Scale. He found that open-minded students became more closed when they were exposed to the structured strategies, but remained the same when exposed to unstructured strategies. Closed-minded students became more open in both teaching situations. It is difficult to generalize from this study, however, since his high and low groups contained only 5 subjects each and were homogeneous in composition according to the criterion variable. This situation is not likely to occur under ordinary conditions.

It has been stated earlier in this chapter that characteristics of effective teachers are judged according to the educational position of the person judging. A relationship between

teacher dogmatism and rating of teacher effectiveness has also been found. Lewis (1968) explored this relationship using secondary school teachers, principals, and supervisors. He used 112 teachers of English, math, history, science, and other subjects, most of whom taught grades 7-9. There was a significant relationship between dogmatism and both principal and supervisor rating of teacher effectiveness, although the relationship was not high enough for prediction purposes. Teachers who were more dogmatic tended to receive the highest ratings.

Very few studies have looked at the relationship between teacher dogmatism and teacher classroom behavior. Those that have have been focused on that segment of dogmatism concerned generally with conservative political thought and ethnocentrism, called authoritarianism. The concept of authoritatianism as originally developed is more narrow than the concept of dogmatism. Persons who are high dogmatics are not necessarily authoritarian personalities.

One of the classic studies which pursued the relationship between teacher authoritarianism and teacher classroom behavior was made by McGee (1955). McGee used 184 classroom teachers and administered the F-scale to them. He observed their behavior in the classroom, using an observation system which he developed to reflect the theory behind the F-scale. A significant correlation was found between the F-scale and the behavior score. The teachers in the study were also found to score lower than the groups reported in the Authoritarian Personality (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950).

Two other studies have also found relationships between authoritarianism and classroom behavior. Del Popolo (1960), using student teachers, found correlations of .47 and .41 between scores on the MTAI and scores on the observation schedule used, and concluded that authoritarian students score lower on both measures. Sandefur and Adams (1976) found that the more authoritarian teachers were consistently rated higher by persons they came in contact with in performance of their duties. The trained observers in the study, students, supervisors, and peers rated them higher. They also tended to use more indirect teaching activity as measured by the ID ratio in Interaction Analysis. These findings seem to conflict with the findings of McGee.

Self-Concept and the Teacher

Much emphasis is placed in educational circles upon the desirability of structuring learning activities so that the child will develop a positive self-concept. Self-concept has been an important concept in education for two decades now and its popularity shows no sign at present of diminishing.

> Self-conceptions include all one's cognitions, conscious and unconscious, about one's physical image; intellectual and moral abilities and weaknesses; socio-economic position in society; national, regional, ethnic, racial and religious identity; the sexual, generational, occupational, marital and parental roles that one plays in society; and how well or poorly one plays such roles.

In short, a person's total conception of himself is
an organization of all the distinctive cognitions,
negative as well as positive, and the affective
connotations of these cognitions that would be
displayed if a full answer to the question
"Who am I?" (Kuhn, 1960) were forthcoming. . . .

In other words, the ultimate purpose of one's
total belief system, which includes one's values,
is to maintain and enhance what McDougall (1926)
has called the master of all sentiments, the
sentiment of self-regard. (Rokeach, 1973, pp.
215-216)

According to leading perceptual psychologists, the self-
concept is important to understand when we consider the behavior
of individuals. Self-concept establishes the limits of behavior
(Combs, 1958). What a person feels about himself influences
what he will perceive in a situation and the alternative courses
of action that are open to him for action.

Carl Rogers (1969) emphasized the self-concept in
describing the facilitator of learning as someone who is able
to be real or genuine - someone who does not deny himself.
For this genuineness to occur, the self-concept must be
accurate and not distorted. Rogers also emphasized the ability
to accept and trust others as qualities essential in the
facilitator of learning. It seems reasonable to expect that
persons who work best with large numbers of people are indi-
viduals who are basically accepting of others. This type of in-
dividual is probably better able to look realistically at strengths

and weaknesses of those with whom he comes into contact
while maintaining a high level of tolerance.

The self-concept of teachers and its influence on certain
aspects of teaching have been researched by a number of in-
dividuals. Hatfield (1961) and Garvey (1970) looked at self-
concept as it affects success in student-teaching. Hatfield
measured students' perceived selves and ideal selves, and found
higher correlations between the two for students judged success-
ful in student teaching. Garvey found that students who rated
high in student teaching also had higher self-concepts. These
two studies support the idea that high self-concept is important
to success in student teaching. All results have not been so
definite, however.

Lantz (1965) explored how the concepts of self and other
related to classroom emotional climate. He used the Interper-
sonal Check List to measure self-concept, other concept, and
ideal self. OScAR, Observational Schedule and Record Instru-
ment (Medley & Mitzel, 1958), was used to measure classroom
climate. He found that none of the variables alone was a
significant predictor of climate. In further analyzing the
data he did find "that individuals who perceived themselves as
more skeptical and distrustful than other elementary teachers
received higher Classroom Emotional Climate Scores" (p. 82).
His interpretation of this finding was that these people felt
more free to be themselves because of a lesser need to conform
or need to be liked.

Freeman and Davis (1975) examined the relationship of self-concept and verbal teaching behaviors. OScAR5V, a variation of OScAR, was used to measure the verbal behavior. They, too, found the variables were not generally useful as predictors of behavior, although almost all the Self Report Inventory scores were linearly related to OScAR.

Cummins (1960) looked at acceptance attitudes of teachers and students, and teachers' role concepts. He reported a significant relationship between the teacher's acceptance of self and others and the student's acceptance of self and others. He also reported a significant relationship between the teacher's acceptance of self and others and perception of the role of teacher. There was no documentation in the article, however, or reports of strength of the relationships found.

Only one study used achievement gain of pupils as the criterion variable. Aspy and Buhler (1975) investigated student cognitive growth as a function of teacher self-concept. They used six third grade teachers. The teachers were observed and a checklist used to determine self-concept. The teachers with high self-concept had higher total gains in their pupils than did low self-concept teachers. When sub-tests of the standardized tests were compared, spelling was the only area in which no significant difference between teachers was found.

As with teacher educational beliefs and teacher dogmatism, a relationship between teacher attitude of acceptance and teacher effectiveness has also been found. Reed (1953) postulated

that more accepting teachers are more effective teachers. He
used over 100 teachers in three secondary schools. He found
that teachers who were more trusting and accepting of students
were rated by the students as more effective. Students did not
rate these teachers as any easier than other teachers. No re-
lationship was found between teachers' acceptance attitudes and
administrator rating of effectiveness.

Austad (1972) used students to explore the relationship
of teaching behavior to attitudes toward self, others and
authority. He used six behaviors as criterion measures:
Clarifying objectives, assessing readiness, motivating interest,
evaluating outcomes, indirect to direct teacher influence
ratio, and student talk to total talk ratio. He found no
correlation greater than that which could be expected by chance.

Can Attitudes Aid in the Study of Behavior?

There has been a wealth of research involving affective
presage variables. Some of the findings show definite patterns.
One such pattern is that teachers who are rated as being most
effective have more often than could be expected by chance
affective structures which are similar to those who are rating
them. Studies have also shown that certain attitudes can be
significant correlates of behavior. The evidence in this in-
stance is somewhat murky, however, and a number of results have
been inconsistent.

It is somewhat difficult to make conclusions from the
studies surveyed because of the divergence of instruments used

for measuring and differences in procedures used. What has been reported, nonetheless, offers some evidence that investigating teacher attitude and its effect on teaching processes and products still looks promising as a source of understanding what happens within the classroom walls.

Those concerned with the measure of attitude have questioned the reason why there are inconsistencies in findings from study to study. Besides the different instruments and approaches used, some theorize that the nature of attitudes themselves lead to the discrepancies found. Thus, Burhans (1971) feels these conflicts can be explained by "1) the use of different attitude objects as stimuli to elicit the attitude response than were used to elicit the behavioral response; 2) the existence of situational factors in the behavioral situation that were quite unlike those in the testing situation; or 3) both of the preceding factors" (p. 420). According to him, attitude and behavior congruence is a complex factor. Even when there is congruence in stimuli which elicit both atittude and behavioral response, there may be factors in the behavioral situation which mask the respondent's attitudes. He explains that "under certain circumstances various social and personal norms may be much more significant determinants of behavior than are attitudes toward a particular attitude object" (Burhans, 1971, p. 422). Kelman (1974) also expressed the view that inconsistencies found are largely a result of the failure to consider social constraints that govern situations.

At the beginning of the chapter, reference was made to Dunkin and Biddle's (1974) statement that teacher classroom behavior is probably an expression of teacher belief. Teachers do behave differently in classrooms. Two studies which deal with teacher attitudes toward specific children demonstrate that teacher attitudes toward these children not only result in specific observable behaviors toward these children, but also that children can predict which class members will likely be the recipients of these behaviors (Good & Brophy, 1972; Silberman, 1969). These studies were similarly designed and executed, with unequivocal results in both instances.

Correlation of teacher behavior with teacher attitudes toward educational practices, self and others, and dogmatism has had mixed results in the few instances in which studies were made. These are cognitive characteristics which teacher educators either try to change through different training programs or feel influence teaching success. Therefore, effort should be made to determine what kinds of relationship these attributes have with overt behavior.

CHAPTER III

DESIGN OF THE STUDY

Sample Selection

The population for this study consisted of the teachers in six sixth-grade centers in a large southeastern city. After the schools for the study had been identified, the principals of these schools obtained volunteers for participation in the study. Each principal was asked to try to obtain 15 volunteers so that the sample would comprise at least 75 volunteers. One school produced 16 volunteers, another school 15 volunteers, two schools 14 volunteers, one school 12, and one school 11 volunteers. There was a total of 82 volunteers in all.

With one exception, each sixth-grade center was organized in a semi-departmentalized manner. One method of organization was that of large time blocks in which each member of a team of teachers was responsible for more than one subject area, with students rotating among team members for appropriate instruction. Two schools were organized in this manner, along with most classes of a third. This latter school also contained a few self-contained classrooms. The other three schools were more departmentalized with shorter time blocks. Students in these schools changed classes four or more times daily.

All of the sixth-grades for public schools are contained in sixth-grade centers in this city. The schools selected for the study were considered representative of all the centers.

Instrumentation

Three self-report instruments were used. Two of the instruments, Opionionnaire on Attitudes Toward Education and Acceptance of Self and Others, are attitudes measures. The third instrument, titled Personal Belief Scale, is the Dogmatism Scale, Form E developed by Rokeach (1960) to measure openness of individuals. The instrument used to measure classroom behavior was the Teacher Practices Observation Record, a sign system.

Opinionnaire on Attitudes Toward Education

Opinnionaire on Attitudes Toward Education was the instrument used to measure attitudes toward educational practices (Lindgren and Patton, 1958). This 50-item scale was developed by the Likert technique. It includes statements as to whether it is desirable to understand student behavior, to use authoritarian methods of controlling student behavior, and to provide subject-matter-centered as opposed to child-centered learning opportunities. The original scale was scored 0 or 1 for each item - agree or disagree. For the present study this was modified to a five-point scale to indicate statements which indicate the range of both extremes, from "not true at all" to "usually true." With this modification the scores may range from 50 to 250, with the highest score indicating the most positive attitudes toward education.

The original scale reported a split-half reliability coefficient of .82. Validation was performed by demonstrating that elementary school teachers scored higher than high school teachers, and women scored higher than men. A split-half reliability coefficient of .82 was again obtained using the modified 5-point scale with the teachers in the present study.

Acceptance of Self and Others

The instrument chosen to measure attitudes toward self and attitudes toward others was Acceptance of Self and Others (Berger, 1952). Developed using the Likert technique, it has 36 items which indicate self-acceptance and 28 items which indicate acceptance of others. It is scored on a scale of from 1 "not at all true of myself" to 5 "true of myself." Although it is administered as one scale it is scored as two different scales. The 36 item subscale which measures acceptance of self can take a range of values from 36 to 180, while the 28 item subscale which measures acceptance of others can range from 28 to 140. For both scales the higher range indicates greater acceptance of self and others.

Split-half reliabilities using the Spearman-Brown formula was computed for five groups. These coefficients ranged from .776 to .884 for the acceptance of others scale and were .894 for all but one of the groups on the acceptance of self scale. (For the groups the coefficient was .746). Validity was determined by correlating essays of attitudes toward self and essays of attitudes toward others of two different groups with

corresponding scale scores. The self-acceptance scale was also validated on a group of stutterers and nonstutterers, and members of a speech rehabilitation group. The acceptance of others scale was further validated on a group of prisoners as compared to college students.

Personal Beliefs Scale

The Personal Beliefs Scale is the Dogmatism Scale, Form E, which was developed by Rokeach (1960). The original scale was developed from statements thought to be characteristic of persons having closed belief systems. All items are designed to measure the closed or open system according to the theoretical position of Rokeach. Five versions of the scale have been successively developed, with Form E, the version used in the present study, containing the best 40 items. Items are scored +1 to +3 for agreement, or -1 to -3 for disagreement. Agreement is closed and disagreement is open for all statements. Thus, the lower scores indicate a more open belief system than do higher scores. A constant of 4 is added to each item score to eliminate negative numbers in the final scoring.

The reliability for the scale was computed using the Spearman-Brown formula for the split-half method. Reliability coefficients were determined for seven groups with this method, and ranged from .68 to .85. Two of the groups used were English, while all the others were American college students. Validity of the instruments was assessed by noting the extent to which

the items represented the various dimensions which constitute an open and closed system according to Rokeach's theoretical position.

Teacher Practices Observation Record

This instrument was developed in accordance with the educational philosophy of John Dewey (Brown, 1968). It consists of 31 pairs of statements, the first of which represents a non-example and the second an example of a teacher behavior consistent with Dewey's philosophy. During an observation period it is possible for each item to get as few as 0 or as many as 3 check marks. It is scored by totaling the check marks for each item and then reversing the scores for the odd-numbered items. Scores may range from 186 to 0, with the high scores indicating experimental practices. A score of 93 or below indicates more nonexperimental practices than experimental. The Teacher Practices Observation Record was developed for use by untrained observers.

Reliability of the Teacher Practice Observation Record was determined in a number of ways. Correlations between total scores for the same observer viewing the same episode were obtained and ranged from .27 to .57. Within observer reliability coefficients computed on the viewings ranged from .48 to .62. Internal consistency reliability, or item reliability ranged from .85 to .93 over the five filmed episodes. Validity of the instrument was largely determined by expert judges.

Data Collection

The principals of each of the participating schools were given the three self-report instruments for the teachers to complete. Each set of instruments was accompanied by a cover letter, containing general instructions, and an envelope. General purposes of the investigation were explained, and participants were ensured privacy of response. The teachers were directed to complete the questionnaires and place them in the envelopes when they were complete. On the face of the envelope was a space in which they were directed to put their total years teaching experience. They were to place their room numbers on the upper right corner of the envelopes. The principals of each school then had the teachers either return their sealed envelopes to the central office or another central location within the school.

Questionnaires to be distributed among the volunteers were taken to all schools during the same week. The following week after the questionnaires had been delivered, schools were scheduled for observer visits. Schools were scheduled for visits randomly. There was a two-week period between observations in the first and last set of schools during which no observations were made. This was necessary because of a system-wide testing program during the first of these weeks, and spring vacation during the second. The observer tried to observe all the participating teachers in a school before observing at the next scheduled school. This practice was

successfully carried out in every case but one, where, because
of special programs which were scheduled, the observer was
unable to view one teacher until after all other observations
had been made.

The room number on the outside of the envelope was used
to determine which classes were to be observed in two schools.
The principal provided a list of classes of teachers who had
promised to participate in the four other schools. Teachers
were observed once. During this observation period, the be-
havior of the teacher was measured using the Teacher Practices
Observation Record, hereafter called the TPOR. Measurement
using this instrument consisted of five minutes of the observer
viewing the classroom interactions, and five minutes of check-
ing on the TPOR the behaviors which had occurred. This pro-
cedure was followed three times for each teacher, for a total
of 30 minutes observation time. The subject that was being
taught during the observation period was written on the top
of the TPOR for each teacher.

There were 66 questionnaires completed and returned with
room numbers. Six questionnaires were returned without room
numbers. There were 81 teachers who were observed, using the
TPOR. Fifteen of these observations were dropped from the
analysis, because of teachers who either turned in no question-
naires or questionnaires that were too incomplete to be included
in the analysis. All observations were made before any of the
questionnaires were scored, to prevent observer bias. Complete

data were obtained on a total of 66 teachers. These are the only data used in the statistical analyses.

Treatment of the Data

All of the instruments were hand-scored by the investigator. Although the instructions emphasized the importance of the respondents answering all items, a number of questionnaires contained omitted items. Twenty-eight of the 198 questionnaires contained one omitted item, nine contained two items omitted, and eleven contained three or more omitted items. In most cases it appeared as if the omitted item had been overlooked. There were a few cases, however, in which the respondent indicated uncertainty on an omit. On questionnaires which contained omitted items, the items which were marked were used to obtain a total score. Then, the average item score was found, multiplied by the number of omitted items, and added to the original score to give a final estimated score.

Scores were punched onto IBM cards. Each card had teachers identified by school and subject-matter. The data were computer analyzed using the SPSS (Nie, Hull, Jenkins, Steinbrenner, & Brent, 1975) statistical programs. Multiple regression analysis was used. The variables were entered/in a step-wise regression procedure to test the hypotheses. The first five variables were tested using the correlation matrix obtained as a by-product from the equation. Hypothesis six was tested using the results of the stepwise regression solution.

The condescriptive subprogram was then run to obtain descriptive statistics for each school.

CHAPTER IV

PRESENTATION AND ANALYSIS OF RESULTS

The final data analysis was made with the data collected on 66 sixth-grade teachers. These teachers completed the questionnaires and were observed teaching by the investigator. All statistics reported were obtained using the linear multiple regression subprogram (Kim & Kohout, 1975) available with the SPSS computer programs and the subprogram Condescriptive (Nie et al., 1975, pp. 181-202) which provided the descriptive statistics for the individual schools concerned.

All statistical tests were performed at the .05 level of significance.

General Group Characteristics

Listed in Table 1 are the means and standard deviations obtained on all the variables. Examination of the individual data revealed that the teachers as a group are relatively experienced, with most of them having taught for four or more years. The investigator is unsure whether this is characteristic of all teachers in the sixth-grade centers, or just a characteristic of the teachers who volunteered to participate.

The mean score for dogmatism for the group is 135.26. This mean is lower than all of the means reported by Rokeach

Table 1

Mean Scores for Experience, Cognitive Traits, and Classroom
Behavior for all Teachers

	Experience	Personal Belief Scale	Opinionnaire on Attitudes Toward Education	Acceptance of Self	Acceptance of Others	Teacher Practices Observation Record
Mean	10.18	135.26	179.91	150.11	105.32	93.88
SD	7.23	28.68	17.58	16.53	10.99	12.27

n = 66.

(1960, p. 90) but approximately 3 points higher than the mean obtained by Rabkin (1966) in his study of teacher dogmatism. In a study in which various groups concerned with education were examined, means of a low of 158.35, for cooperating teachers, to a high of 170.87, for education professors, were obtained (Brown & Vickery, 1967). This seems to indicate that this group was comparatively low in dogmatism.

The mean score obtained for educational attitudes is above the neutral point of 150, indicating a trend toward attitudes which can be described as more child-centered than teacher-centered. Mean item scores indicate the group generally scored higher on the acceptance of self-scale than the acceptance of others scale, although both scales had group means higher than the neutral points of 108 for acceptance of self and 84 for acceptance of others.

Correlation coefficients of all the independent variables were obtained and are presented in Table 2. Tests of significance indicate that dogmatism is significantly correlated with each of the other independent variables except for experience. The correlation with experience is also the only one which is positive, although it is low. The greatest correlations of the Personal Belief Scale are with the Opinionnaire on Attitudes Toward Education and Acceptance of Self. The correlations with all the variables except experience indicate that the less dogmatic individuals tended to score highest on these scales.

All of the variables except experience are significantly correlated with at least one variable. Both the educational

Table 2

Correlations Between Experience, Cognitive Traits, and Classroom Behavior for all Teachers

	Personal Belief Scale	Opinionnaire on Attitudes Toward Education	Acceptance of Self	Acceptance of Others	Teacher Practices Observation Record
Experience	.13	-.04	.09	.11	.13
Personal Belief Scale		-.49*	-.41*	-.27*	-.23
Opinionnaire on Attitudes Toward Education			.13	.30*	.29*
Acceptance of Self				.50*	.06
Acceptance of Others					.02

* $p < .05$

attitudes and the acceptance of self scales are significantly correlated with the dogmatism and the acceptance of others scale. The acceptance of others scale is significantly correlated with every other variable except experience. These correlations indicate that individuals with more child-centered attitudes tend to be less dogmatic and have a more favorable attitude toward others. Persons with the most favorable attitudes toward others tend to have the most favorable attitudes toward self, tend to be more child-centered in attitudes toward education, and less dogmatic. There are no significant trends noted for experience.

School Characteristics

Means were also obtained for each variable by school. School C had the lowest mean experience, but had one of the highest dogmatism mean scores and lowest Teacher Practices Observation Record (TPOR) mean scores. Of the schools with the highest mean experience, one, School D, had the highest dogmatism mean score and the lowest TPOR mean score, and the other, School F, had the lowest dogmatism mean score and one of the highest TPOR mean scores. This latter school also had the highest mean score for acceptance of self and one of the highest mean scores for educational attitudes. It would be difficult to put any reasonable interpretation on this, however, as the number of teachers who participated from School F was so small.

Table 3

Mean Scores for Experience, Cognitive Traits, and Classroom
Behavior for Individual Schools

	School					
	A	B	C	D	E	F
Experience						
Mean	9.07	9.00	6.69	14.11	12.75	14.17
SD	6.16	6.34	4.57	5.53	11.70	8.61
Personal Belief Scale						
Mean	126.13	133.80	141.31	148.11	139.00	124.33
SD	27.95	28.97	29.76	25.55	23.37	37.51
Opinionnaire on Attitudes Toward Education						
Mean	184.47	178.47	176.85	180.33	177.38	181.50
SD	21.80	22.22	11.10	9.59	14.29	21.62
Acceptance of Self						
Mean	149.20	152.93	150.77	151.00	141.63	153.83
SD	16.03	13.45	20.08	9.91	20.00	21.91

Table 3 (Continued)

			School			
	A	B	C	D	E	F
Acceptance of Others						
Mean	107.73	107.27	103.46	104.33	103.13	102.83
SD	7.05	13.34	7.26	9.11	12.77	19.77
Teacher Practices Observation Record						
Mean	94.67	96.93	90.69	90.22	94.25	96.17
SD	18.09	9.38	8.97	10.53	12.09	11.55

Note: N School A = 15; n school B = 15; n school C = 13; n school D = 9; n school E = 8; n school F = 6.

School A had the highest mean score for educational attitudes, the highest mean score for acceptance of others, and one of the lowest dogmatism mean scores. Only two of the six schools scored above the mean for all teachers on the acceptance of others scale, while only two of the six schools scored below the mean for all teachers on the acceptance of self scale. This is consistent with the trend noted that the teachers generally had a tendency to score higher on the acceptance of self scale than the acceptance of others scale. The mean scores on the TPOR for all schools was higher than the mean score for all teachers, except for School C, which had the lowest mean experience and one of the highest mean dogmatism scores, and School D, which had the highest mean experience and the highest dogmatism mean.

Test of the Hypotheses

To test the first five hypotheses, the five independent variables were correlated with the dependent variable and tested for significance. The results are given in Table 2.

The correlation coefficient obtained for the first hypothesis is not significant. There is insufficient evidence to reject the null hypothesis and to state that years teaching experience is related to the teaching behaviors measured by the TPOR.

The correlation coefficient obtained in the test of hypothesis number two also did not reach significance. There

is no reason to reject null hypothesis two. Teacher open-mindedness is not significantly related to child-centered teaching behaviors.

A significant correlation coefficient was obtained in the test of hypothesis number three. The null hypothesis is rejected. Teacher attitudes toward educational practices is related to teaching behavior as measured by the TPOR.

Null hypothesis four was not rejected. There is insufficient evidence that attitudes of acceptance toward self is related to teaching behaviors considered child-centered.

Null hypothesis five was also not rejected. There is no evidence that attitudes of acceptance of others is related to child-centered teaching behaviors.

Null hypothesis six was tested by entering the variables into a stepwise linear multiple regression equation. The results of this analysis are reported in Table 4. The overall F-ratio is not significant, and the null hypothesis is not rejected. Attitudes toward education contribute significantly to explanation of behavior scores and is entered on the first step. None of the variables entered thereafter add significantly to the equation. The amount of variation accounted for by educational attitudes is small, however, at only 8%.

The summary table in Table 4 gives the results of the regression analysis. The variable Acceptance of Self was not entered into the equation because the tolerance level was insufficient for its entry. All of the variables together account for about 13% of the variation in teaching behaviors measured.

Table 4

Multiple Regression of Experience and Cognitive Traits
with Classroom Behavior

Source	Sum of Squares	DF	Mean Square	F
Among Groups	1284.52	4	321.13	2.30
Within Groups	8508.51	61	139.48	

SUMMARY TABLE

	Multiple R	R Square	Beta	F
Step 1 Opinionnaire on Attitudes Toward Education	.29	.08	.29	5.91*
Step 2 Experience	.32	.10	.14	1.42
Step 3 Personal Belief Scale	.35	.12	-.14	1.05
Step 4 Acceptance of Others	.36	.13	-.12	.81

* $p < .05$

Further Data Analysis

As the investigator was observing classes, it was noted
that the teachers of mathematics seemed to be scoring in a
similar way no matter how effective their lessons seemed to be
to the observer. It seemed reasonable, upon reflection, that
effective mathematics lessons on this level of basic skill
learning would involve many behaviors which lose points on the
TPOR. These are behaviors such as organizing lessons around
specific teacher initiated questions, asking questions that can
only be answered if the lesson has been studied, and accepting
only one answer as being correct, for example. For this reason,
the investigator decided that it would be appropriate to remove
the data for all of the teachers who were teaching mathematics
when they were observed and subject the remaining data to the
same statistical treatment used to test the hypotheses.

There were 15 classes that were observed while the
teachers were teaching mathematics. The removal of the data
for these teachers left a total of 51 teachers to be used in
the analysis. The means obtained on the variables in this new
analysis are presented in Table 5. The means for three of the
variables are essentially the same as those obtained for the
total group, while the means of the other three variables are
about two to three points higher.

Table 6 contains the correlation matrix for the independent
variables. Experience is not significantly correlated with any
of the variables, as in Table 2, but this time the Opinionnaire

Table 5

Mean Scores for Experience, Cognitive Traits, and Classroom Behavior
Excluding Mathematics Teachers

	Experience	Personal Belief Scale	Opinionnaire on Attitudes Toward Education	Acceptance of Self	Acceptance of Others	Teacher Practices Observation Record
Mean	10.90	138.45	181.67	150.14	105.49	95.55
SD	7.61	29.45	16.75	17.49	10.60	12.48

n = 51.

Table 6

Correlations Between Experience, Cognitive Traits, and Classroom
Behavior Excluding Mathematics Teachers

	Personal Belief Scale	Opinionnaire on Attitudes Toward Education	Acceptance of Self	Acceptance of Others	Teacher Practices Observation Record
Experience	.17	-.07	.06	.13	.06
Personal Belief Scale		-.52*	-.40*	-.20	-.36*
Opinionnaire on Attitudes Toward Education			.05	.13	.42*
Acceptance of Self				.44*	.02
Acceptance of Others					.03

*$p < .05$.

on Attitudes Toward Education is also not significantly corre-
lated with any variable except the Personal Belief Scale. The
Acceptance of Self Scale again has significant correlations
with the Personal Belief Scale and Acceptance of Others Scale.

The independent variables were entered in a stepwise linear
regression with the TPOR. The correlations obtained were again
tested for significance. Experience was not significantly re-
lated to child-centered teaching behaviors without the mathe-
matic classes.

The Personal Belief Scale, however, did produce a
significant correlation. When the teachers of mathematics are
removed, dogmatism is significantly related to the TPOR, with
teachers who are less dogmatic receiving significantly higher
TPOR scores than teachers who are more dogmatic. Table 8
shows that the mathematics teachers had the lowest TPOR mean
and the lowest mean on the Personal Belief Scale for any group
except the teachers of School F. An examination of Tables 2,
6, and 9 indicates that the mathematics teachers have the only
instance of a positive correlation of the TPOR with the Personal
Belief Scale, even though it is small enough to not be meaning-
ful. When this group is removed from the analysis, this positive
influence is removed.

The correlation for the Opinionnaire on Attitudes Toward
Education reached significance again. Thus, when the group of
mathematics teachers are removed there is a significant positive
relationship between attitudes toward education and child-
centered teaching behaviors.

Table 7

Multiple Regression of Experience and Cognitive Traits
with Classroom Behavior, Mathematics Teachers Excluded

Source	Sum of Squares	DF	Mean Square	F
Among Groups	1784.86	5	356.97	2.67*
Within Groups	6005.77	45	133.46	

SUMMARY TABLE

		Multiple R	R Square	Beta	F
Step 1	Opinionnaire on Attitudes Toward Education	.42	.18	.42	10.46*
Step 2	Personal Belief Scale	.45	.20	-.19	1.67
Step 3	Experience	.47	.22	.12	.88
Step 4	Acceptance of Self	.48	.23	-.11	.58
Step 5	Acceptance of Others	.48	.23	-.04	.07

p < .05; n = 51.

Table 8

Mean Scores for Experience, Cognitive Traits, and Classroom
Behavior for Mathematics Teachers

	Experience	Personal Belief Scale	Opinionnaire on Attitudes Toward Education	Acceptance of Self	Acceptance of Others	Teacher Practices Observation Record
Mean	7.73	124.40	173.93	150.00	104.73	88.20
SD	5.28	23.62	19.56	13.26	12.63	9.92

Table 9

Correlations Between Experience, Cognitive Traits, and Classroom Behavior for Mathematics Teachers

	Personal Belief Scale	Opinionnaire on Attitudes Toward Education	Acceptance of Self	Acceptance of Others	Teacher Practices Observation Record
Experience	-.34	-.08	.27	.05	.26
Personal Belief Scale		-.71*	-.53*	-.61*	.03
Opinionnaire on Attitudes Toward Education			.48	.74*	-.36
Acceptance of Self				.81*	.31
Acceptance of Others					-.04

*$\underline{p} < .05$

When the variables were entered in a linear stepwise multiple regression equation, a significant overall F-ratio was obtained. The results of this analysis are reported in Table 7. When the mathematics teachers are removed from the analysis, better prediction does occur. This is due, however, to the large F-ratio obtained with the first variable entered, Opinionnaire on Attitudes Toward Education, which accounts for 18% of the explained variance. This is more than twice the variance which could be explained by the same variable when the mathematics teachers were included in the analysis. None of the other variables add significantly to the explained variance.

Summary

Null hypothesis one was not rejected. Experience was not significantly related to the TPOR.

Null hypothesis two was not rejected. Dogmatism was not significantly related to the TPOR.

Null hypothesis three was rejected. Attitudes toward educational practices were significantly related to the TPOR.

Null hypothesis four was not rejected. Attitude toward self were not significantly related to the TPOR.

Null hypothesis five was not rejected. Attitudes toward others were not significantly related to the TPOR.

Null hypothesis six was not rejected. Experience, attitudes toward education, dogmatism, and attitudes toward self and

others were not significantly related to the TPOR.

A reexamination of the data in which the mathematics teachers were excluded from the analysis resulted in three tests proving significant. Attitudes toward educational practices were again found to be significantly related to child-centered teaching behaviors as measured by the TPOR. In the new analysis, dogmatism was also found to be significantly related to the TPOR. Experience, dogmatism and attitudes toward educational practices, self and others were also significantly related to the TPOR.

CHAPTER V

SUMMARY, DISCUSSION, AND IMPLICATIONS

Summary

This study was undertaken to explore what effect the belief systems and structures of teachers have on certain classroom processes. The belief structure examined was dogmatism, and the belief systems examined were attitudes toward educational practices, self and others. It tried to answer the following questions:

1. What relationship exists between teaching experience and child-centered teaching practices?

2. What relationship exists between dogmatism and child-centered teaching practices?

3. What relationship exists between educational attitudes and child-centered teaching practices?

4. What relationship exists between attitudes of self-acceptance and child-centered teaching practices?

5. What relationship exists between attitudes of acceptance of others and child-centered teaching practices?

6. What relationship exists between teacher belief systems and structures, teacher years of experience, and child-centered teaching behaviors?

To answer these questions, data from 66 sixth-grade classroom teachers were collected. The data included teacher responses to three self-report instruments which measured dogmatism, attitudes toward educational practices that could be considered child-centered or teacher/authority-centered, and attitudes of acceptance of self and other persons. Teachers also indicated how many years of teaching experience they had. Each teacher was observed teaching a regularly scheduled class for a period of 30 minutes. During this time data were obtained on the TPOR to indicate to what degree child-centered teaching practices were used during the observational period.

Six hypotheses were established to be tested. The first five hypotheses were established to test the relationship between each of the four belief variables and also years of teaching experience, and child-centered teaching practices. The sixth hypothesis was established to test how all the belief variables together with years teaching experience relate to child-centered teaching behaviors. The data were subjected to regression analysis and tested at the alpha = .05 level of significance.

1. Hypothesis one was not rejected. There was no significant relationship found to exist between years of teaching experience and child-centered teaching practices.

2. Hypothesis two was not rejected. There was no significant relationship found to exist between teacher dogmatism and child-centered teaching practices.

3. Hypothesis three was rejected. The data indicate that attitude toward educational practices is significantly related to child-centered teaching practices.

4. Hypothesis four was not rejected. There was no significant relationship found to exist between teacher attitude of acceptance of self and child-centered teaching practices.

5. Hypothesis five was not rejected. There was no significant relationship found to exist between teacher attitude of acceptance of others and child-centered teaching practices.

6. Hypothesis six was not rejected. There was no significant relationship found to exist between teacher attitude toward educational practices, self, others, teacher dogmatism, and teacher years of experience and child-centered teaching practices.

Discussion

The data were reexamined using the same procedure but excluding all data from teachers who were teaching mathematics during the observation period. In this reanalysis a significant relationship was again found between educational attitudes and child-centered teaching practices. However, a significant relationship was also found between dogmatism and child-centered teaching practices, and all the variables and child-centered teaching practices. These last two relationships were not found when all the teachers were used in the analysis.

This research undertaking was guided by the belief that underlying attitudes that persons hold become expressed in overt behaviors under situations where this behavior is desirable. Since it has been demonstrated that teachers are sometimes rated on the effectiveness of their teaching according to how certain attitudes or belief structures they hold compare with

those of the rater, it was felt that teacher attitudes should be related to specific behavioral expressions of these attitudes.

The attitudes are important in the educational setting because of the ways they are expressed in the teaching process. These behaviors may be conscious acts on the part of the teacher, such as the use of certain materials in the instructional process, the use of certain grouping arrangements in the instructional process, or the emphasis of some parts of the curriculum over others. These behaviors may also be unconscious acts on the part of the teacher. Whether conscious or unconscious, it is in the classroom that these attitudes, as they are expressed in behavioral acts, affect the education of children.

Research undertakings in the past have shown some connection between certain teacher beliefs and teacher behavior, but these studies have sometimes shown conflicting results. When we look at the results of this study, it appears as if certain teacher attitudes, specifically teacher attitudes toward educational practices that can be typified as being either traditional-authority oriented, or progressive child-oriented, can be definitely related to certain kinds of teaching behaviors that can be described as child-oriented. This was found to be also true of teacher dogmatism. Dogmatism, or open-mindedness, of the group of teachers studied appeared generally lower than many other teacher and educator groups studied by others.

Nonetheless, there was still a relationship between dogmatism and teacher behavior that was made evident when the mathematic teachers were excluded from the data analysis. Teachers who were more open-minded tended to have more favorable attitudes toward educational practices and to also display more child-centered teaching behaviors in their classes.

It is interesting that the relationship between teacher dogmatism and child-centered teaching occurs only with the exclusion of the mathematic teachers. There seems to be a discernible difference in teaching methods that occurs when teachers on this level teach mathematics as opposed to when they teach science, social studies, or reading. This difference occurs, perhaps because of the nature of the subject matter and the level of the learners.

Facility in mathematic concepts can be viewed as a highly structured sequential series of learning tasks. The mathematic concepts encountered through grade six are basic skills that must be incorporated on an almost automatic level if students are to progress successfully to higher levels in mathematics. On this basic level there is probably as much, if not more, practice in skills to the point of overlearning, as there is exploration with applications of these skills. Addition, sub-traction and multiplication facts must be committed to memory so that there is instant recall when a particular fact is needed in a given operation. This allows the student to be really free to concentrate on the intricacies of various problems in later development. With these thoughts in mind

and the reality of the constraints encountered in public schools,
such as time and class size, it does not seem unreasonable for
these teachers not to have children pursuing individual interests
during the mathematics lesson. It seems reasonable to have
teachers asking children specific questions that are designed
to elicit the instantaneous kind of response desired in the
mastery of mathematics skills.

Experience in teaching was the only variable in the study
that was consistent in showing no relationship to any other
variable. This finding is consistent with other studies which
have shown no relationship between experience and teacher
attitude toward educational practices and teacher dogmatism.

Results from the analysis of teacher attitude of accep-
tance of self and acceptance of others is also consistent with
most of the research findings reviewed. Self-concept has been
related to student-teaching success, but has not been related
to specific teacher behaviors in a consistent manner.

Implications

The actions of teachers depend upon many factors.
Teachers must consider what to teach, methods of teaching,
how to integrate and organize the myriad of activities of the
day, when to respond to the students as a group or as individuals,
ad infinitum. The fact that it may be demonstrated that some of
the behaviors that occur during the classroom interactions are
related to certain attitudes and ways of believing is signifi-
cant. The knowledge of what kinds of attitudes occur with

certain behaviors can be considered an important step in the search for answers in the study of teaching. It can help answer the question of why some teachers are more likely than others to use a particular technique or approach.

More systematic research of this nature would prove helpful in answering the preceding question. Observational systems should be used in classroom settings. The systems chosen for use should be theoretically linked to the problem under investigation. Cognitive properties of teachers should be studied in relation to these systems. This should be done by having teachers respond to instruments designed to measure these properties, and also by having investigators use inference systems to measure them.

It is important for future research of this kind that the researcher be concerned with how the content of the lesson may affect the behavior of the teacher. Often researchers fail to mention what teachers were engaged in teaching. As the present study appears to demonstrate, this can make the critical difference in determining relationships. Not only is the subject area important to consider when planning this type research, but also the intent of the lesson. Teachers conducting drill and review lessons apparently will behave differently than teachers encouraging self-expression. Research efforts should either include a large sampling of teaching behaviors from various occasions, or limit the research to the same kind of

lesson content. Because of the difficulty in synchronizing the content of the lessons of an appreciable number of teachers, the former approach may prove more viable than the latter.

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APPENDIX

Dear Teacher:

The study in which you have been asked to participate is
for my dissertation, part of my doctoral program at the
University of Florida. Your cooperation in completing
the three questionnaires will be appreciated. Most per-
sons have been able to complete all three within an
hour.

Your answers to the questionnaires will be reported in the
dissertation only as a summary of the replies of all the
teachers taking part in the study. Since your name is not
to be given, complete privacy for your answers is assured.

When you have completed the forms, please place them in the
envelope provided, seal it, and place your room number in
the right hand corner.

IMPORTANT: Although sometimes a statement may be difficult
for you to answer according to the scale provided, it is
necessary for you to ANSWER EVERY ITEM as best you can for
proper data interpretation.

Thank you for your cooperation.

Sincerely,

BERNADINE J. BOLDEN

PERSONAL BELIEF SCALE

The following is a study of what some teachers feel about a number of important social and personal questions. The best answer to teach statement below is your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself aggreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others, whether you agree or disagree with any statement, you can be sure that many people feel the same as you do.

Mark each statement in the left margin according to how much you agree or disagree with it. _Please mark every one_. Write +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.

+1: I AGREE A LITTLE   -1: I DISAGREE A LITTLE

+2: I AGREE ON THE WHOLE   -2: I DISAGREE ON THE WHOLE

+3: I AGREE VERY MUCH   -3: I DISAGREE VERY MUCH

_____1. The United States and Russia have just about nothing in common.

_____2. The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent.

_____3. Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.

_____4. It is only natural that a person would have a much better acquaintance with ideas he believes in than with ideas he opposes.

_____5. Man on his own is a helpless and miserable creature.

_____6. Fundamentally, the world we live in is a pretty lonesome place.

_____7. Most people just don't give a "damn" for others.

_____8. I'd like it if I could find someone who would tell me how to solve my personal problems.

_____ 9. It is only natural for a person to be rather fearful of the future.

_____ 10. There is so much to be done and so little time to do it in.

_____ 11. Once I get wound up in a heated discussion I just can't stop.

_____ 12. In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.

_____ 13. In a heated discussion I generally become so absorbed in what I am going to say that I forget to listen to what the others are saying.

_____ 14. It is better to be a dead hero than to be a live coward.

_____ 15. While I don't like to admit this even to myself, my secret ambition is to become a great person, like Einstein, or Beethoven, or Shakespeare.

_____ 16. The main thing in life is for a person to want to do something important.

_____ 17. If given the chance I would do something of great benefit to the world.

_____ 18. In the history of mankind there have probably been just a handful of really great thinkers.

_____ 19. There are a number of people I have come to hate because of the things they stand for.

_____ 20. A man who does not believe in some great cause has not really lived.

_____ 21. It is only when a person devotes himself to an ideal or cause that life becomes meaningful.

_____ 22. Of all the different philosophies which exist in this world there is probably only one which is correct.

_____ 23. A person who gets enthusiastic about too many causes is likely to be a pretty "wishy-washy" sort of person.

_____ 24. To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.

_____25. When it comes to differences of opinion in religion we must be careful not to compromise with those who believe differently from the way we do.

_____26. In times like these, a person must be pretty selfish if he considers primarily his own happiness.

_____27. The worst crime a person could commit is to attack publicly the people who believe in the same thing he does.

_____28. In times like these it is often necessary to be more on guard against ideas put out by people or groups in one's own camp than by those in the opposing camp.

_____29. A group which tolerates too much differences of opinion among its own members cannot exist for long.

_____30. There are two kinds of people in this world: those who are for the truth and those who are against the truth.

_____31. My blood boils whenever a person stubbornly refuses to admit he's wrong.

_____32. A person who thinks primarily of his own happiness is beneath contempt.

_____33. Most of the ideas which get printed nowadays aren't worth the paper they are printed on.

_____34. In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.

_____35. It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.

_____36. In the long run the best way to live is to pick friends and associates whose tastes and beliefs are the same as one's own.

_____37. The present is all too often full of unhappiness. It is only the future that counts.

_____38. If a man is to accomplish his mission in life it is sometimes necessary to gamble "all or nothing at all."

_____39. Unfortunately, a good many people with whom I have discussed important social and moral problems don't really understand what's going on.

_____40. Most people just don't know what's good for them.

OPINIONNAIRE ON ATTITUDES TOWARD EDUCATION

Below are a number of statements about which teachers may have different opinions.

You are to respond to each question by circling the appropriate number in the column to the right, according to the following scheme:

1	2	3	4	5
Not at all true	Seldom true	Occasionally true	Frequently true	Usually true

Choose the answer you think best for each item. Please answer all questions.

1. Boys and girls who are delinquent are, when all   1 2 3 4 5
    is said and done, basically good.

2. If boys and girls are to do an adequate job of   1 2 3 4 5
    learning in school, their needs for love must be
    met.

3. It is appropriate for teachers to require an   1 2 3 4 5
    additional assignment from a pupil who misbehaves
    in class.

4. How a student feels about what he learns is as   1 2 3 4 5
    important as what he learns.

5. The way to handle a pupil who tells lies is to   1 2 3 4 5
    threaten to punish him.

6. The high school pupil who is not interested in   1 2 3 4 5
    having dates should be commended.

7. Education has failed unless it has helped boys   1 2 3 4 5
    and girls to understand and express their own
    feelings and experiences.

8. You should tell a child who masturbates that it   1 2 3 4 5
    leads to ruined health.

9. The classroom experiences that are most helpful   1 2 3 4 5
    to boys and girls are the ones wherein they can
    express themselves creatively.

10. All children should be encouraged to aim at the   1 2 3 4 5
    highest academic goals.

11. The child who bites his nails should be shamed.   1 2 3 4 5

12. Children outgrow early emotional experiences as   1 2 3 4 5
    they do shoes and clothes.

13. What boys and girls become as adults is more closely related to the experiences they have with other than it is to mastery of specific subject matter.　1 2 3 4 5

14. It is more important for students to learn to work together cooperatively than it is for them to learn how to compete.　1 2 3 4 5

15. Some pupils are just naturally stubborn.　1 2 3 4 5

16. Students should be permitted to disagree with the teacher.　1 2 3 4 5

17. It is better for a girl to be shy and timid than "boy crazy."　1 2 3 4 5

18. Boys and girls should learn that most of life's problems have several possible solutions and not just one "correct" one.　1 2 3 4 5

19. The first signs of delinquency in a pupil should be received by a tightening of discipline and more restrictions.　1 2 3 4 5

20. The newer methods of education tend to standardize children's behavior.　1 2 3 4 5

21. Most boys and girls who present extreme cases of "problem behavior" are doing the best they can to get along with other people.　1 2 3 4 5

22. An activity to be educationally valuable should train reasoning and memory in general.　1 2 3 4 5

23. It is more important for a child to have faith in himself than it is for him to be obedient.　1 2 3 4 5

24. Being grouped according to ability damages the self-confidence of many boys and girls.　1 2 3 4 5

25. Criticism of children by teachers is more effective for obtaining desired behavior than criticism of children by others their own age.　1 2 3 4 5

26. All questions a student asks should be recognized and considered.　1 2 3 4 5

27. The pupil who isn't making good grades should be told to study harder.　1 2 3 4 5

28. Children should not be permitted to talk without permission of the teacher.　1 2 3 4 5

29. A student who will not do his homework should be helped in every way possible.　1 2 3 4 5

30. Boys and girls in elementary school should be promoted regardless of whether they have completed the work for their grade or not.　1 2 3 4 5

31. The teacher should lower grades for misconduct in class.　1 2 3 4 5

32. A teacher should permit a great deal of latitude in the way he permits boys and girls to address him. 1 2 3 4 5

33. It is a good idea to tell a pupil that he can succeed in any type of work if he works hard. 1 2 3 4 5

34. Students will tolerate errors and even occasional injustices in a teacher who, they feel, likes and understands them. 1 2 3 4 5

35. A teacher should accept the deficiencies and short-comings of a student, as well as his good points. 1 2 3 4 5

36. Each time a pupil lies his punishment should be increased. 1 2 3 4 5

37. Boys and girls can learn proper discipline only if they are given sufficient freedom. 1 2 3 4 5

38. If a teacher keeps school conditions exactly the same and gives all pupils an equal opportunity to respond, he has done all he can do. 1 2 3 4 5

39. If a pupil constantly performs for attention, the teacher should see to it that he gets no attention. 1 2 3 4 5

40. Dishonesty is a more serious personality charac-teristic than unsocialness. 1 2 3 4 5

41. A great deal of misbehavior problem behavior results from fear and guilt. 1 2 3 4 5

42. The teacher's first responsbility in all cases of misconduct is to locate and punish the offender. 1 2 3 4 5

43. It is better for boys and girls to talk about the things that bother them than to try to forget them. 1 2 3 4 5

44. Most pupils need some of the natural meanness taken out of them. 1 2 3 4 5

45. It is more important for boys and girls to be liked and accepted by their friends than it is for them to get along with their teachers. 1 2 3 4 5

46. Teachers should answer children's questions about sex frankly and, if possible, without show of embarrassment. 1 2 3 4 5

47. When a pupil obeys all the rules of the school, one can be sure he is developing moral character. 1 2 3 4 5

48. When a teacher is told something in confidence by a child, he should keep the matter just as confi-dential as though it were entrusted to him by an adult. 1 2 3 4 5

49. Since a person memorizes best during childhood,   1 2 3 4 5
    that period should be regarded as a time to
    store up facts for later use.

50. Students should play a very active part in for-   1 2 3 4 5
    mulating rules for the classroom and the school.

ACCEPTANCE OF SELF AND OTHERS

This is a study of some of your attitudes. Of course, there is
no right answer for any statement. The best answer is what you
feel is true of yourself.

You are to respond to each question by circling the appropriate
number in the column to the right, according to the following
scheme:

1	2	3	4	5
Not at all true of myself	Slightly true of myself	About halfway true of myself	Mostly true of myself	True of myself

Remember, the best answer is the one which applies to you.

1. I'd like it if I could find someone who would tell
   me how to solve my personal problems.   1 2 3 4 5

2. I don't question my work as a person, even if I
   think others do.   1 2 3 4 5

3. I can be comfortable with all varieties of people--
   from the highest to the lowest.   1 2 3 4 5

4. I can become so absorbed in the work I'm doing
   that it doesn't bother me not to have any intimate
   friends.   1 2 3 4 5

5. I don't approve of spending time and energy in
   doing things for other people. I believe in look-
   ing to my family and myself more and letting others
   shift for themselves.   1 2 3 4 5

6. When people say nice things about me, I find it
   difficult to believe they really mean it, I think
   maybe they're kidding me or just aren't being sin-
   cere.   1 2 3 4 5

7. If there is any criticism or anyone says anything
   about me, I just can't take it.   1 2 3 4 5

8. I don't say much at social affairs because I'm
   afraid that people will criticize me or laugh if
   I say the wrong thing.   1 2 3 4 5

9. I realize that I'm not living very effectively but
   I just don't believe that I've got it in me to use
   my energies in better ways.   1 2 3 4 5

10. I don't approve of doing favors for people. If
    you're too agreeable they'll take advantage of you. 1 2 3 4 5

11. I look on most of the feelings and impulses I have
    toward people as being quite natural and acceptable. 1 2 3 4 5

12. Something inside me just won't let met be satisfied   1 2 3 4 5
    with any job I've done--if it turns out well, I get
    a very smug feeling that this is beneath me, I
    shouldn't be satisfied with this, this isn't a fair
    test.

13. I feel different from other people. I'd like to   1 2 3 4 5
    have the feeling of security that comes from know-
    ing I'm not too different from others.

14. I'm afraid for people that I like to find out what   1 2 3 4 5
    I'm really like, for fear they'd be disappointed in
    me.

15. I am frequently bothered by feelings of inferiority. 1 2 3 4 5

16. Because of other people, I haven't been able to   1 2 3 4 5
    achieve as much as I should have.

17. I am quite shy and self-conscious in social   1 2 3 4 5
    situations.

18. In order to get along and be liked, I tend to be   1 2 3 4 5
    what people expect me to be rather than anything
    else.

19. I usually ignore the feelings of others when I'm   1 2 3 4 5
    accomplishing some important end.

20. I seem to have a real inner strength in handling   1 2 3 4 5
    things. I'm on a pretty solid foundation and it
    makes me pretty sure of myself.

21. There's no sense in compromising. When people have   1 2 3 4 5
    values I don't like, I just don't care to have much
    to do with them.

22. The person you marry may not be perfect, but I be-   1 2 3 4 5
    lieve in trying to get him (or her) to change along
    desirable lines.

23. I see no objection to stepping other people's toes   1 2 3 4 5
    a little if it'll help me get what I want in life.

24. I feel self-conscious when I'm with people who have   1 2 3 4 5
    a superior position to mine in business or at
    school.

25. I try to get people to do what I want them to do,   1 2 3 4 5
    in one way or another.

26. I often tell people what they should do when they're 1 2 3 4 5
    having trouble in making a decision.

27. I enjoy myself when I'm alone, away from other   1 2 3 4 5
    people.

28. I think I'm neurotic or something.   1 2 3 4 5

29. I feel neither above nor below the people I meet.   1 2 3 4 5

30. Sometimes people misunderstand me when I try to keep   1 2 3 4 5
them from making mistakes that could have an important
effect on their lives.

31. Very often I don't try to be friendly with people   1 2 3 4 5
because I think they won't like me.

32. There are very few times when I compliment people   1 2 3 4 5
for their talents or jobs they've done.

33. I enjoy doing little favors for people even if I   1 2 3 4 5
don't know them well.

34. I feel that I'm a person of worth, on an equal   1 2 3 4 5
plane with others.

35. I can't afford feeling guilty about the way I feel   1 2 3 4 5
toward certain people in my life.

36. I prefer to be alone rather than have close friend-   1 2 3 4 5
ships with any of the people around me.

37. I'm not afraid of meeting new people. I feel that   1 2 3 4 5
I'm a worthwhile person and there's no reason why
they should dislike me.

38. I sort of only half-believe in myself.   1 2 3 4 5

39. I seldom worry about other people. I'm really   1 2 3 4 5
pretty self-centered.

40. I'm very sensitive. People say things and I have   1 2 3 4 5
a tendency to think they're criticizing me or in-
sulting me in some way and later when I think of it,
they may not have meant anything like that at all.

41. I think I have certain abilities and other people   1 2 3 4 5
say so too, but I wonder if I'm not giving them an
importance way beyond what they deserve.

42. I feel confident that I can do something about the   1 2 3 4 5
problems that may arise in the future.

43. I believe that people should get credit for their   1 2 3 4 5
accomplishments but I very seldom come across wrok
that deserves praise.

44. When someone asks for advice about some personal   1 2 3 4 5
problems, I'm most likely to say, "It's up to you
to decide," rather than tell him what he should do.

45. I guess I put on a show to impress people. I know   1 2 3 4 5
I'm not the person I pretend to be.

46. I feel that for the most part one has to fight his   1 2 3 4 5
way through life. That means people who stand in
the way will be hurt.

47. I can't help feeling superior (or inferior) to most   1 2 3 4 5
of the people I know.

48. I do not worry or condemn myself if other people pass judgment against me.   1 2 3 4 5

49. I don't hesitate to urge people to live by the same high set of values which I have for myself.   1 2 3 4 5

50. I can be friendly with people who do things which I consider wrong.   1 2 3 4 5

51. I don't feel very normal, but I want to feel normal.   1 2 3 4 5

52. When I'm in a group I usually don't say much for fear of saying the wrong thing.   1 2 3 4 5

53. I have a tendency to sidestep my problems.   1 2 3 4 5

54. If people are weak and inefficient I'm inclined to take advantage of them. I believe you must be strong to achieve your goals.   1 2 3 4 5

55. I'm easily irritated by people who argue with me.   1 2 3 4 5

56. When I'm dealing with younger persons, I expect them to do what I tell them.   1 2 3 4 5

57. I don't see much point in doing things for others unless thay can do you some good later on.   1 2 3 4 5

58. Even when people do think well of me, I feel sort of guilty because I know I must be fooling them-- that if I were really to be myself, they wouldn't think well of me.   1 2 3 4 5

59. I feel that I'm on the same level as other people and that helps to establish good relations with them.   1 2 3 4 5

60. If someone I know is having difficulty in working things out for himself, I like to tell him what to do.   1 2 3 4 5

61. I feel that people are apt to react differently to me than they would normally react to other people.   1 2 3 4 5

62. I live too much by other people's standards.   1 2 3 4 5

63. When I have to address a group, I get self-conscious and have difficulty saying things well.   1 2 3 4 5

64. If I didn't always have such hard luck, I'd accomplish much more than I have.   1 2 3 4 5

TEACHER PRACTICES OBSERVATION RECORD

TOT	I	II	III	TEACHER PRACTICES
				1. T makes self center of attention.
				2. T makes p center of attention.
				3. T makes some thing itself center of p's attention.
				4. T makes doing something center of p's attention
				5. T has p spend time waiting, watching, listening.
				6. T has p participate actively.
				7. T remains aloof or detached from p's activities.
				8. T joins or participates in p's activities.
				9. T discourages or prevents p from expressing self freely.
				10. T encourages p to express self freely.
				11. T organizes learning around Q posed by T.
				12. T organizes learning around p's own problem or Q.
				13. T prevents situation which causes p doubt or perplexity.
				14. T involves p in uncertain or incomplete situation.
				15. T steers p away from "hard" Q or problem.
				16. T leads p to Q or problem which "stumps" him.

TOT	I	II	III	TEACHER PRACTICES
				17. T emphasizes gentle or pretty aspects of topic.
				18. T emphasizes distressing or ugly aspects of topic.
				19. T asks Q what p can answer only if he studied the lesson.
				20. T asks Q that is not readily answerable by study of lesson.
				21. T accepts only one answer as being correct.
				22. T asks p to suggest additional or alternative answers.
				23. T expects p to come up with answers T has in mind.
				24. T asks p to judge comparative value of answers or suggestions.
				25. T expects p to "know" rather than to guess answer to Q.
				26. T encourages p to guess or hypothesize about the unknown or untested.
				27. T accepts only answers or suggestions closely related to topic.
				28. T entertains even "wild" or far-fetched suggestion of p.
				29. T lets p "get by" with opinionated or stereotyped answer.
				30. T asks p to support answer or opinion with evidence.
				31. T collects and analyzes subject matter for p.
				32. T has p make his own collection and analysis of subject matter.

TOT	I	II	III	TEACHER PRACTICES
				33. T provides p with detailed facts and information.
				34. T has p find detailed facts and information on his own.
				35. T relies heavily on textbook as source of information.
				36. T makes a wide range of informative material available.
				37. T accepts and uses inaccurate information.
				38. T helps p discover and correct factual errors and inaccuracies.
				39. T permits formation of misconceptions and overgeneralizations.
				40. T questions misconceptions, faulty logic, unwarranted conclusions.
				41. T passes judgment on p's behavior or work.
				42. T withholds judgment on p's behavior or work.
				43. T stops p from going ahead with plan which T knows will fail.
				44. T encourages p to put his ideas to a test.
				45. T immediately reinforces p's answer as "right" or "wrong."
				46. T has p decide when Q has been answered satisfactorily.
				47. T asks another p to give answer if one p fails to answer quickly.
				48. T asks p to evaluate his own work.
				49. T provides answer to p who seems confused or puzzled.
				50. T gives p time to set and think, mull things over.

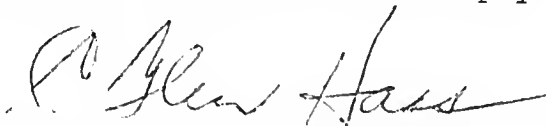| TOT	I	II	III	TEACHER PRACTICES
				51. T has all p working at same task at same time.
				52. T has different p working at different tasks.
				53. T holds all p responsible for certain material to be learned.
				54. T has p work independently on what concerns p.
				55. T evaluates work of all p by a set standard.
				56. T evaluates work of different p by different standards.
				57. T motivates p with privileges, prizes, grades.
				58. T motivates p with intrinsic value of ideas or activity.
				59. T approaches subject matter in direct, business like way.
				60. T approaches subject matter in indirect, informal way.
				61. T imposes external disciplinary control on p.
				62. T encourages self-discipline on part of p.

BIOGRAPHICAL SKETCH

Bernadine Johnson Bolden was born on August 21, 1938, in Newark, New Jersey. She attended public schools in Newark, and graduated from West Side High School. Her undergraduate degree was completed at Howard University in Washington, D. C., and led to a Bachelor of Science degree in Psychology.

After teaching school for a year, she married Thomas Bolden, Jr. A daughter, Terri Anne, was born in June, 1963. Another daughter, Tanya Anita, was born in December, 1966.

She lived in Indiana for a period of nine years. During this time she taught elementary school first in South Bend and later in Washington Township (Indianapolis). Upon moving to Jacksonville, Florida, in 1972 she entered the master's program at the newly opened University of North Florida and received a master's degree in Educational Administration and Supervision. In September of 1973 she was employed as an Instructor in the Department of Elementary and Secondary Education at the University of North Florida. She began advanced graduate studies in the College of Education, Curriculum and Instruction, in June, 1974.
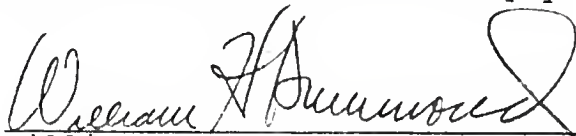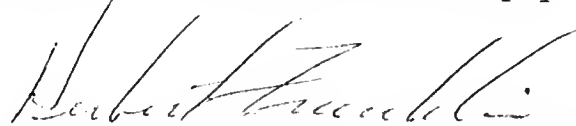
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

C. Glen Hass, Chairman
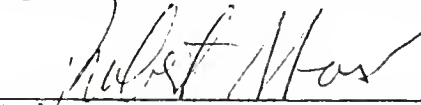Professor of Curriculum and
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Herbert Franklin
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This dissertation was submitted to the Graduate Faculty
of the Department of Curriculum and Instruction in the
College of Education and to the Graduate Council, and
was accepted as partial fulfillment of the requirements
for the degree of Doctor of Philosophy.

August 1977

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